

SEQUENCE LISTING

<110> Williams, Richard B.

<120> SYSTEM AND METHODS FOR NUCLEIC ACID AND
POLYPEPTIDE SELECTION

<130> PRONOV.001BPC

<150> 09/859,809

<151> 2001-05-17

<150> 60/206,016

<151> 2000-05-19

<150> 60/346,965

<151> 2001-11-16

<150> 60/529,331

<151> 2003-12-12

<150> PCT/US02/37103

<151> 2002-11-18

<150> 10/847,087

<151> 2004-05-17

<150> 60/625,707

<151> 2004-11-05

<150> 10/847,484

<151> 2004-05-17

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chemically synthesized fragment

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<222> (6)...(6)

<223> n=p

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cuagancugg agg

13

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<222> (2)...(3)

<223> psoralen bound to UA

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<222> (6)...(6)

<223> n=p

<400> 2

cuagancugg agg

13

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<221> misc_feature

<222> (1)...(5)

<223> n=g, a, u, or c

<221> misc_feature

<222> (19)...(23)

<223> n=g, a, u, or c

<400> 3

nnnnnccucc agaucuagnn nnn

23

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<222> (1)...(5)

<223> n=g, a, u, or c

<221> misc_feature

<222> (19)...(23)

<223> n=g, a, u, or c

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nnnnnccucc agaucuagnn nnn
23

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RNA fragment

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<223> n=p

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13

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thymine at residue 8 before pseudouridine

<221> modified_base
<222> (9)...(9)
<223> n=p

<221> misc_feature
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<223> n=puromycin

<400> 6
uccugutnc gauccacaga auucgcacnn
30

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tRNA; thymine at residue 21 before pseudouridine

<221> modified_base
<222> (22)...(22)
<223> n=p

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<221> misc_feature
<222> (43)...(43)
<223> n=puromycin

<221> modified_base
<222> (6)...(6)
<223> n=p

<400> 7
cuagancugg agguccugug tncgauccac agaauucgca ccn
43

<210> 8
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<223> Chemically synthesized fragment 1

<400> 8
gcggauuuag cucaguuggg agagcgccag acu
33

<210> 9
<211> 76..
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<223> Chemically synthesized fragment 1 + 2 + 3;
        modified tRNA; thymine at residue 54 before
        pseudouridine

<221> modified_base
<222> (39)...(39)
<223> n=p

<221> modified_base
<222> (55)...(55)
<223> n=p

<221> misc_feature
<222> (76)...(76)
<223> n=puromycin

<221> misc_feature
<222> (35)...(36)
<223> psoralen binding at UA position

<400> 9
gcggauuuag cucaguuggg agagcgccag acucuaganc uggagguccu gugtncgauc 60
cacagaauc gcaccn
76

<210> 10
<211> 32
<212> RNA
<213> Artificial Sequence

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<220>
<223> chemically synthesized fragment 1; 3' hydroxyl at terminus

<400> 10
gcggauuuag cucaguuggg agagcgccag ac

32

<210> 11
<211> 8
<212> RNA
<213> Artificial Sequence

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<223> chemically synthesized fragment 2; psoralentated RNA

<221> modified_base
<222> (1)...(1)
<223> N=p

<221> modified_base
<222> (7)...(7)
<223> N=p

<400> 11
ncuaacnc

8

<210> 12
<211> 36
<212> DNA
<213> Artificial Sequence

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<223> Mixed DNA/RNA chemically synthesized fragment 3

<221> modified_base
<222> (15)...(15)
<223> n=p

<221> misc_feature
<222> (36)...(36)
<223> n=puromycin

<400> 12
uggagguccu gugtnCGauc cacagaaUuc gcaccn

36

<210> 13
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<212> RNA
<213> Artificial Sequence

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<223> chemically synthesized modified RNA fragment

<221> modified_base
<222> (4)...(4)
<223> n=p

<221> modified_base
<222> (11)...(12)
<223> n=p

<400> 13
ccnccagag nnagaccc 18

<210> 14
<211> 14
<212> RNA
<213> Artificial Sequence

<220>
<223> chemically synthesized fragment 2

<221> modified_base
<222> (7)...(7)
<223> n=p

<221> modified_base
<222> (9)...(9)
<223> n=p

<400> 14
ucuaagncng gagg 14

<210> 15
<211> 73
<212> DNA
<213> Artificial Sequence

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<223> chemically synthesized; mixed DNA/RNA; alternate
psoralentated Fragment 1 + 2 + 3

<221> modified_base
<222> (32)...(32)
<223> N-3-methyl uridine

<221> misc_feature
<222> (36)...(37)
<223> psoralen bound to UA

<221> modified_base
<222> (40)...(40)
<223> N=p

<221> modified_base
<222> (42)...(42)
<223> N=p

<221> misc_feature
<222> (73)...(73)
<223> N=puromycin

<400> 15

gcggauuuag cucaguuggg agagcgccag anuucuaagn cnggaggucc ugugtycgau 60
ccacagaauu cgn 73

<210> 16
<211> 32
<212> RNA
<213> Artificial Sequence

<220>
<223> Chemically synthesized fragment 1 ; 3' hydroxyl at terminus

<400> 16
gcggauuuag cucaguuggg agagcgccag ac 32

<210> 17
<211> 8
<212> RNA
<213> Artificial Sequence

<220>
<223> Chemically synthesized fragment 2 ; 3' hydroxyl at terminus

<221> modified_base
<222> (1)...(1)
<223> n=p

<221> modified_base
<222> (7)...(7)
<223> n=p

<400> 17
ncuaaanc 8

<210> 18
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Chemically synthesized; mixed DNA/RNA fragment 3

<221> modified_base
<222> (15)...(15)
<223> N=p

<221> misc_feature
<222> (36)...(36)
<223> N=puromycin

<400> 18
uggagguccu gugtnCGauc cacagaauuc gcaccn 36

<210> 19
<211> 21
<212> RNA

<213> Artificial Sequence
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 <223> Chemically synthesized; modified RNA fragment
 <221> modified_base
 <222> (9)...(11)
 <223> N=p
 <400> 19
 ccccccgann nagaccccc c 21
 <210> 20
 <211> 26
 <212> RNA
 <213> Artificial Sequence
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 <223> chemically synthesized; seq A1
 <400> 20
 auauauauau auauauauau gggggg 26
 <210> 21
 <211> 26
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Chemically synthesized; seq A2
 <400> 21
 ccccccatat atatatatat atatat 26
 <210> 22
 <211> 31
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 <223> Chemically synthesized; seq 1B
 <221> misc_feature
 <222> (1)...(1)
 <223> no phosphorylation on 5' end
 <400> 22
 gcggauuuag cucaguuggg agagcgccag a 31
 <210> 23
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 <223> Chemically synthesized; seq 1B1

<221> misc_feature
<222> (1)...(1)
<223> no phosphorylation on 5' end

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31

<210> 24
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<223> Chemically synthesized RNA sequence

<221> misc_feature
<222> (35)...(36)
<223> crosslinker between residue 35 and 36

<221> misc_feature
<222> (36)...(36)
<223> phosphorylated

<400> 24
gcggauuuag cucaguuggg agagcgccag acucua

36

<210> 25
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<221> misc_feature
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<223> hydroxylated

<221> misc_feature
<222> (35)...(36)
<223> crosslinker between residues 35 and 36

<221> misc_feature
<222> (36)...(36)
<223> phosphorylated

<400> 25
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36

<210> 26
<211> 61
<212> RNA
<213> Artificial Sequence

<220>
<223> Chemically synthesized RNA sequence

<221> misc_feature
 <222> (59)...(60)
 <223> crosslinker between residues 59 and 60

<400> 26
 ggguaacuu uagaaggagg ucgccaccac gguuaaaaug aaaaugaaaa ugaaaaugua 60
 g 61

<210> 27
 <211> 55
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> Chemically synthesized RNA sequence M1

<400> 27
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<210> 28
 <211> 61
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> Chemically synthesized RNA sequence

<221> misc_feature
 <222> (59)...(60)
 <223> crosslink between residue 59 and 60

<221> misc_feature
 <222> (61)...(61)
 <223> g bound to biotin

<221> misc_feature
 <222> (33)...(34)
 <223> n=g, a, u, or c

<400> 28
 ggguaacuu uagaaggagg ucgccaccac ggnnaaaaug aaaaugaaaa ugaaaaugua 60
 g 61

<210> 29
 <211> 61
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> Chemically synthesized RNA sequence

<400> 29
 ggguaacuu uagaaggagg ucgccaccac gguuaaaaug aaaaugaaaa ugaaaaugua 60
 g 61

<210> 30
 <211> 21

<212> RNA

<213> Artificial Sequence

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<223> Chemically synthesized RNA sequence; generic version of SEQ ID NO: 19

<221> misc_feature

<222> (1)...(6)

<223> n=g, a, c, or u

<221> modified_base

<222> (9)...(11)

<223> n=p

<221> misc_feature

<222> (15)...(21)

<223> n=g, a, c, or u

<400> 30

nnnnnnngann nagannnnnn n

21

<210> 31

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Chemically synthesized; mixed DNA/RNA sequence

<221> misc_feature

<222> (1)...(1)

<223> phosphorylated

<221> misc_feature

<222> (14)...(14)

<223> thymine

<221> modified_base

<222> (15)...(15)

<223> n=p

<221> misc_feature

<222> (36)...(36)

<223> n=puromycin

<400> 31

uggagguccu gugtnCGauc cacagaaUuc gcaccn

36

<210> 32

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Chemically synthesized; Mixed DNA/ RNA sequence

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<221> misc_feature
<222> (1)...(1)
<223> phosphorylated

<221> misc_feature
<222> (14)...(14)
<223> thymine

<221> modified_base
<222> (15)...(15)
<223> n=p

<221> misc_feature
<222> (36)...(36)
<223> puromycin attached at 3' end

<400> 32
uggagguccu gugtnccgauc cacagaauc caccac                                     36

<210> 33
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<212> DNA
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<223> mixed DNA/RNA chemically synthesized primer for
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<221> modified_base
<222> (32)...(32)
<223> N-3-methyl uridine

<221> misc_feature
<222> (35)...(36)
<223> psoralen bound to UA

<221> modified_base
<222> (39)...(39)
<223> p

<221> modified_base
<222> (41)...(41)
<223> p

<221> misc_feature
<222> (72)...(72)
<223> n=puromycin

<400> 33
gcggauuuag cucaguuggg agagcgccag anucuaagnc nggagguccu gugtycgauc 60
cacagaauc gn                                                         72

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